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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,646	10/31/2001	Minoru Furukawa	09792909-5267	2364
7590 08/05/2005 Sonnenschein, Nath & Rosenthal P. O. Box 061080 Wacker Drive Station - Sears Tower Chicago, IL 60606			EXAMINER PHAM, TITO QUANG	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/002,646	<b>Applicant(s)</b> FURUKAWA, MINORU	
	<b>Examiner</b> Tito Pham	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: apparatus 100 in figure 1 and network 803 in figure 11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because "host CPU" in figure 1 is mislabeled; "routers" 804, 805, 806, 807 in figure 11 are mislabeled; and "picture transmitting device" 809 in figure 11 is mislabeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several

Art Unit: 2667

views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: S109 in figure 13. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The disclosure is objected to because of the following informalities: in page 26 line 8 of the specification, queue "D" is mistyped as "A."

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 3, 7, 8, 9, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyce et al.

- Regarding claims 1, 7, and 13, Boyce et al. shows a data transmitting apparatus comprising: packet generating means for generating transmitting data (figure 8a); packet generating means performs packet generating processing by identifying an importance degree of data stored in each packet and setting packet priority in its header (column 17 lines 9-19).
- Regarding claim 2 and 8, Boyce et al. reveals a packet generating means (figure 8a); the packet generating means sets importance degree of data, in which high priority information is set to data containing reference information from other data and low priority information is set to data not containing reference information from other data (see figure 5 & 6, figure 8a prioritizer 104)
- Regarding claims 3 and 9, Boyce et al. discloses the data stored in the packet generated by the packet generating means are MPEG (figure 5 & 6), and packet generating means performs packet generating processing by setting

Art Unit: 2667

priority information, which indicates which one of I picture, P picture, and B picture is contained in the data stored in each data packet, in header information (column 9 lines 65-67; column 10 lines 1-10, 54-67; column 11 lines 1-12).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 4, 5, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce et al. in view of Sturges et al.

Regarding claims 4, 5, 10, and 11, Boyce et al. discloses a packet generating means performing packet processing by assigning packet priority in the packet header based on the importance of the data (see figure 8a). Boyce et al. does

not specifically mention the packet generating means performs IP packet processing wherein priority information in accordance to the importance of the data to be set in the IP header and the priority information corresponds to the service quality conforming to QoS. However, Sturges et al. discloses a communication system supporting an IP network service with end-to-end quality of service (figure 1). Sturges's system marks packets for priority based on the application in the header of the IP packet (column 4 lines 27-31,45-52). Moreover, QoS is known as a measure of reliability of successfully passing packets between two points in the network. In the video data transmission, according to the patent application, high priority is given to the more important data to ensure acceptable reconstruction of the video image at the receiving side. Therefore, it would have been obvious to one of the ordinary skill in the art of the time of the invention to have Quality of Service (QoS) with IP header priority setting based on the importance of data to be included in the network.

10. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce et al. in view of Kohzuki et al.

Regarding claims 6 and 12, Boyce et al shows a packet generating means (see figure 8a). Boyce et al. does not disclose the priority information to be set by the generating means corresponds to a selecting standard of any one of a guarantee type for bandwidth assurance data transmission and a best effort type for bandwidth non-assurance data transmission. However, Kohzuki reveals a

transmission device of sending high priority packet at a guarantee bandwidth and low priority packet at a best effort type (figure 12, column 4 lines 26-33). Thus, it would have been obvious to one of the ordinary skill in the art of the time of the invention to include the guarantee bandwidth type for high priority packet and best effort type for low priority effort in Boyce et al.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Park et al. discloses a wireless communication for video packet transmission.
- Joseph reveals a video signal system provides compressed video data in groups of frames and divides the compressed data between high and low priority channels.
- Taniguchi shows a data transmission system having a video unit transmitting a stream coding unit which is packetized, and a header served as an identifier and packet priority.
- Yamaguchi et al. discloses an apparatus for processing video and audio data including processing priority data.
- Fukushima et al. discloses a data transmission apparatus performing continuous data transmission from the transmitting end to receiving end.




Art Unit: 2667

Each packet has additional information relation to its sequence number, priority, and data reproduction time at the receiving end.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tito Pham whose telephone number is 571-272-8617. The examiner can normally be reached on 8-5 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2667  
2/28/05